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NEORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known Application Number 10/589,688 Filing Date August 17, 2006 First Named Inventor Mark Greene Art I Init To be Determined Examiner Name To be Determined Attorney Docket Number UPN0017-100 (P3086)

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U.S. PATENT DOCUMENTS Document Number Name of Patentae or Applicant of Cited Document Cite No. Dublication Date Pages, Columns, Lines, Where Rele Examine MM-GD-YYYY Passages or Relevent Figures Appear Initials Number - Kind Code² lif known AA 115,5 328 985 07-12-1994 Takeshi Sano et al. AR 05,21,2002 US-6,391,590 Takeshi Sano et al. 07-02-2002 US-6,413,934 Patrick S. Stayton et al. AC US-6.451.995 09-17-2002 Nai-Kong V. Cheung et al. 12,24,2002 Daniel Meruelo et al. US-6,497,881 45 US-7,144,991 12-05-2006 Stephen Goshom et al AG US-5,334,702 08-02-1994 Mark I. Greene et al. AH US-5,663,144 09-02-1997 Mark I . Greene et al 07-06-1999 Al US-5,919,764 Mark I. Greene et al AJ US-6,022,523 02-08-2000 William F. Degrado et al. AK US-6,100,377 08-08-2000 Mark I. Greene et al. 05-16-2006 Mark I. Greene et al. AL US-7,045,286 06-01-2004 AM Mark I. Greene et al. US-6,743,592 AN 10-15-2001 Mark I. Greene et al US 2002-0094534

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Takeshi Sano et al.

07-13-1999

09-09-1997

Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (# known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	To.
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) To be Determined Examiner Name Complete if Known Application Number 10/589,688 Filing Date August 17, 2006 First Named Inventor Art Unit To be Determined Examiner Name To be Determined

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		NON PATENT LITERAT	URE DOCUMENTS		,				
Examiner Initials *	Cite No.								
	ΑQ	Argarana, et al., "Molecular cloning and nucleo Res. (1986), 14 (4): 1871-1882.	tide sequence of t	he streptavidin gene," Nucleic Acids					
	AR	Chirinos-Rojas, C.L. et al., "A peptidomimetic a identified from a phage-displayed random pep	tide library," Im	nunol. (1998), 161(10):5621-6					
	AS	Dubel, S. et al., "Bifunctional and multimeric complexes of streptavidin fused to single chain antibodies (scPv)," J Immunol Methods (1995), 178(2):201-9.							
~	AT	Felix, A.M., "Applications of BOP reagent in solid phase synthesis", Int. J. Pep. Prot. Res. 1988 31:231- 238.							
	ΑÜ	Giralt, E. and Andreu eds, In Peptides, ESCOM, Leiden, The Netherlands 1991,131-133.							
	ΑV	Hruby, "Conformational restrictions of biologically active peptides via amino acid side chain groups," Life Sci. (1982) 31: 189-199.							
	AW	Karp, et al., "Identification of biotinylated molecules using a baculovirus-expressed luciferase- streptayidin fusion protein," Biotechniques (1996), 20 (3): 452-456, 458-459.							
	AX	Kipriyanov, et al., "Affinity enhancement of a recombinant antibody: formation of complexes with multiple valency by a single-chain Fv fragment-core streptavidin fusion," Pretrin Eng. (1996), 9 (2): 203-211.							
	AY	Kipriyanov, et al., "Single-chain antibody streptavidin fusions: tetrameric bifunctional scFv- complexes with bioth binding activity and enhanced affinity to antigen," Hum. Antibodies Hybridoma (1955), 62, 193-101.							
	ΑZ	Kishore et al., "A recombinant homotrimer, composed of the alpha helical neck region of human surfactant protein D and Clq B chain globular domain, is an inhibitor of the classical complement pathway." I Immund (2011) 166: 559-565.							
Examiner Signature /Samuel Liu/ Date Considered 06/21/2010				06/21/2010					

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Complete if Known Application Number 10/589.688 INFORMATION DISCLOSURE Filing Date August 17, 2006 STATEMENT BY APPLICANT First Named Inventor Mark Greene Art Unit To be Determined (Use as many sheets as necessary) Examiner Name To be Determined Sheet 13 of 5 Attorney Docket Number UPN0017-100 (P3086)

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, calalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where publisher.d.	T²
	BA	Koo, et al., "Development of a streptavidin-conjugated single-chain antibody that binds Bacillus cereus spores," Applied Environ. Microbiol. (1998), 64 (7): 2497-2502.	
	ва	Le, et al., "A streptavidin-cellulose-binding domain fusion protein that binds biotinylated proteins to cellulose," Enzyme Microb. Technol. 16 (6): 496-500,1994	
	80	Lee, W. et al., "Solution structure of the tetrameric minimum transforming domain of p53 ," Nature Struct. Biol. (1994), 1: 877-890.	
	80	Murali et al.," Structure-based design of immunologically active therapeutic peptides," Immunol. Res. (1998) 17: 163-169.	
	BE	Ohno and Meruelo, "Multi-drug delivery system using streptavidin-transforming growth factor- alpha chimeric protein," DNA Cell Biol. (1996), 15 (5): 401-406.	
	BF	Ohno, et al., "Cell-specific, multidrug delivery system using streptavidin-protein A fusion protein," Biochem. Mal. Med. (1996)58 (2): 227-233.	
	8G	Pearce, et al. "Linear gene fusions of antibody fragments with streptavidin can be linked to biotin labelled secondary inolecules to form bispecific reagents," Biochem. Mol. Biol. Int. (1997)42 (6): 1179-1188.	
	BH	Pleux, 0. et al., "Cyclization of peptides on a solid support. Application to cyclic analogs of substance P," Int. J. Pep. Prot. Res. (1987), 29: 162-169.	
	81	Porstmann, T. et al., "Enzyme immunoassay techniques. An overview," J Immunol Methods. (1992), 150(1-2):5-21.	
***************************************	BJ	Porstmann, B. et al., "Which of the commonly used marker enzymes gives the best results in colorimetric and fluorimetric enzyme immunoassays: horseradish peroxidase, alkaline phosphatase or beta-galactosidase?"] Immunol Methods (1985), 79(1):27-37.	
	BK	Prasad et al., "Contrasting solution conformations of peptides containing alpha, alpha dialkylated residues with linear and cyclic side chains," Biopolymers (1995) 35: 11-20.	

Examiner Signature	/Samuel Liu/	Date Considered	06/21/2010

*EXAMINER; Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)

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4	of	5	Altomey Docket Number	UPN0017-100 (P3086)	

		NON PATENT LITERAT	URE DOCUMENTS				
Examiner Initials *	Cite No.1						
	BL	Rogers et al., "Characterization of disulfide c tetramer, and intermediate filament levels," J					
	ВМ	Roland J. et al., "The synthetic CD4 exocyclic translocation, HIV-1 promoter activation, and Nov;18(11):819-28.					
	BN	Romani, S. et al., "Synthesis of the trypsin fra The unsymmetrical double chain cystine pepi					
	во	Sano and Cantor, "Expression of a cloned streptavidin gene in Escherichia coli," Proc. Natl. Acad. Sci. USA (1990), 87 (1): 142-146.					
	вр	Sano and Cantor, "A streptavidin-protein A c specific antibody conjugates," Biotechnology (1		s one-step production of a variety of			
	BQ	Sano and Cantor, "Expression vectors for stre Biochem.Biophys. Res. Commun (1991), 176 (2):		ng chimeric proteins,"			
	s specific labeling of biological ad. Sci. USA (1998), 89 (5): 1534-1538.						
BS Saragovi et al., "Design and synthesis of a mimetic from an antibody complementarity region," Science (1991), 253: 792-795.							
	BT	Schiller et al., "Synthesis of side-chain to side-chain cyclized petide analogs on solid supports," Int. J. Pep. Prol. Res. (1985), 25: 171-177.					
	BU		chweitzer et al., "Inaugural article: immunoassays with rolling circle DNA amplification: a erastile platform for ultrasensitive antigen detection," Proc Natl Acad Sci U S.A. (2000), 7(3):10113-9.				
	BV	Sheppard, R. C., "Acid-labile resin linkage ag Peptide Res. (1982), 20: 451-454.	ents for use in soli	d phase peptide synthesis ," Int.].			
Examiner Signature		/Samuel Liu/	Date Considered	06/21/2010			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

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		NON PATENT LITERATURE DOCUMENTS	
Examiner	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	τ²
	BW	Stinivasan, M. et al., "Immunomodulatory peptides from IgSF proteins: a review," Curr Protein Pept Sci. (2005), 6(2):185-96.	
	ВX	Tannous et al., "T7 RNA polymerase as a self-replicating label for antigen quantification," Nucleic Acids Res (2002), 30(24):e140.	
	BY	Walsh and Swaisgood, "An Escherichia coli plasmid vector system for production of streptavidin fusion proteins Expression and bioselective adsorption of streptavidin-β-galactusidase," Biotech. Bione, 1994) 44: 1348-1354.	
	82.	Williams et al.," Development of biologically active peptides based on antibody structure," Proc. Natl Acad. Sci. USA (1989), 86: 5537-5541.	
	CA	Zhang X. et al., "Synthetic CD4 exocyclics inhibit binding of human immunodeficiency virus type 1 envelope to CD4 and virus replication in T lymphocytes," Nat Biotechnol. (1997), 15(2):150-4.	
	СВ	Zhang et al., "Crystal structure of recombinant human platelet factor 4," Biochem (1994), V33: 8361-8366.	

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,	Examiner Signature	/Samuel Liu/	Date Considered	06/21/2010	

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